

## Chapter 2: Understanding Standards, Assessment, and Accountability

**T**he term *aiming high* looks to the future—reaching beyond past accomplishments. But knowing where to aim requires an understanding of the past and the present.

In the early part of the twentieth century, when railroad travel was the norm in America, the poor side of town was often called “the other side of the tracks” because tracks divided the haves from the have-nots in local communities. Schools perpetuated that divide to meet labor market needs. Schools tended to focus on the 20 percent of students who excelled in academia and who moved into the leadership positions expected of people in their socioeconomic status. At the same time schools were minimally educating the other 80 percent of students who moved into the plethora of blue-collar, farming, or service jobs.<sup>1</sup>

However, the problem of the past is evolving into a crisis of the future. An analysis of California tax returns between 1975 and 1998 provides irrefutable evidence that the income gap between the 20 percent of taxpayers who are the highest wage earners and the 80 percent of the other taxpayers is becoming a chasm. The share of income attributable to the top 20 percent is rising dramatically while the income of the bottom 80 percent is falling almost every year.<sup>2</sup>

Today's global, knowledge-based economy requires nearly all workers to perform at high levels to keep America competitive. Each high school student in California deserves to have access to high-skill, high-wage jobs that facilitate upward mobility in income.

How can high schools contribute to the solution? Research demonstrates that setting high standards and expectations for all students, not just the academically inclined, results in increased performance for all students schoolwide.<sup>3</sup> The research is equally clear that students who are placed in lower academic ability groups almost never advance beyond the remedial level.<sup>4</sup> Standards-based education does not preclude flexibility or flexible grouping for acceleration; it simply ensures that all students are exposed to the same high expectations and rich teaching.

A standards-based educational system must embrace accountability for *all* students. The process provides a seamless educational delivery system built on state and district support to ensure that all students are prepared for postsecondary education and careers and productive citizenship.

Standards, assessment, and accountability are the framework of a standards-based educational system (see Table 2). The standards may be organized into three categories: (1) academic content standards adopted by the State Board of Education (SBE); (2) other standards adopted by SBE, the State Superintendent of Public Instruction, local school districts, or a combination of these; and (3) standards reflected in selected rigorous course examinations. Assessment includes the Standardized Testing and Reporting (STAR) program, the *California High School Exit Examination (CAHSEE)*, *Golden State Examinations*, *SAT I* and *SAT II*, *ACT*, *Assessments in Career Education*, *Advanced Placement Examinations*, *International Baccalaureate Examinations*, University of California/California State University placement examinations, *California English-Language Development Test*, and locally adopted measures. Accountability is tied to the Academic Performance Index, and accreditation is awarded through the regional accreditation process.<sup>5</sup>

**Table 2** Framework of a Standards-Based Educational System

STANDARDS	Core academic content standards adopted by the State Board of Education	Other content/career standards adopted by the State Board of Education, the State Superintendent of Public Instruction, or local school districts	Selected rigorous course examinations reflecting the standards
	<ul style="list-style-type: none"> <li>English–language arts</li> <li>Mathematics</li> <li>Science</li> <li>History–social science</li> </ul>	<ul style="list-style-type: none"> <li>Visual and performing arts standards</li> <li>English-language development standards</li> <li>Foreign language standards</li> <li>Career-technical education standards</li> <li>Health and physical education standards</li> <li>Service-learning standards</li> <li>Standards embedded in high school course work that meet University of California and California State University subject matter requirements</li> </ul>	<ul style="list-style-type: none"> <li>Advanced Placement Examinations</li> <li>International Baccalaureate Examinations</li> <li>SAT I</li> <li>SAT II</li> <li>ACT</li> <li>Golden State Examinations</li> <li>Assessments in Career Education</li> </ul>
ASSESSMENTS	<i>Standardized Testing and Reporting (STAR) program</i>	<i>Other state assessments</i>	<i>Local assessments</i>
	<ul style="list-style-type: none"> <li>Stanford Achievement Test, Ninth Edition, Form T (Stanford 9) (through 2002)</li> <li>Spanish Assessment of Basic Education, Second Edition</li> <li>California Standards Tests</li> </ul>	<ul style="list-style-type: none"> <li>California High School Exit Examination</li> <li>California English-Language Development Test</li> <li>Golden State Examinations</li> <li>Assessments in Career Education</li> <li>Voluntary assessments of career-technical standards</li> <li>State-mandated physical fitness tests</li> </ul>	<ul style="list-style-type: none"> <li>Local assessments reflecting state-adopted standards and local standards aligned with Expected Schoolwide Learning Results (ESLRs)</li> </ul>
ACCOUNTABILITY	<i>State Academic Performance Index</i>	<i>Local Accountability</i>	
	<ul style="list-style-type: none"> <li>Academic Performance Index (API) (Senate Bill 1X). A scale of 1 to 10 (deciles) is designed to rank California K–12 public schools. The legislation states that 60 percent of the API's value shall be based on STAR program test scores and the remaining 40 percent shall come from student and school staff attendance rates and high school graduation rates. (These additional indicators are currently under development.)</li> </ul>	<ul style="list-style-type: none"> <li>The term of accreditation is awarded through the regional accreditation process.</li> </ul>	

## Rigorous Standards Tied to High-Stakes Accountability

The State Board of Education has adopted rigorous content standards in the core academic areas of English–language arts, mathematics, history–social science, and science. Most school districts have adopted these academic content standards, which define for each grade level (from kindergarten through grade twelve) what students should know and be able to do in the four academic areas. The standards are available on the California Department of Education (CDE) Web site <<http://www.cde.ca.gov/standards.html>>.

The California content standards are assessed by a number of measures, some of which are high-stakes tests. Some measures represent high stakes for students and schools; some represent high-stakes for schools but not students; and some represent high stakes for students but not schools.

High-stakes tests provide useful information, but no single test can monitor student progress or provide all the information necessary to make decisions on ways in which to improve student learning and school programs. For example, standardized tests are used in the state's accountability system to assess student learning.<sup>6</sup> One type of standardized test is a norm-referenced test.<sup>7</sup> The multiple-choice or selected-response format can be limited in assessing the higher-order cognitive thinking required for college-level work and productive citizenship.

The writing portion of *CAHSEE* includes both selected-response items (e.g., multiple choice) and more constructed-response items (e.g., short answer or essay) that allow students to demonstrate their skills.<sup>8</sup> Nonetheless, schools and teachers also need local-level assessments that employ performance tasks to assess the application of the content standards and engage young minds in the learning process. (See Table 3 for a reference list of the tests used to assess student learning in California.)

Although Table 3 indicates the tests used to assess standards, the question remains, *Which* standards are assessed? This question may seem a puzzling one. After all, if there are standards, are they not all assessed?

**Table 3** Tests Used to Assess Student Learning in High School

## Mandatory Statewide Assessments

**STAR Program** (Senate Bill 376). Standardized Testing and Reporting (STAR) requires that students in grades 9 through 11 be tested in reading, writing, mathematics, history–social science, and science.

National Standardized Norm-Referenced Test ( <i>Stanford 9</i> ) <sup>^</sup>	<i>Spanish Assessment of Basic Education (SABE2)</i> <sup>^</sup>	<i>California Standards Tests</i> <sup>*</sup>	<i>California High School Exit Examination (CAHSEE)</i> (Senate Bill 2X) <sup>*</sup>	<i>California English Language Development Test (CELDT)</i>
All public school districts in California are required to test students annually in grades 2–11 in basic skills by using a single standardized test designated by the State Board of Education. The test is to be norm-referenced.	English learners in grades 2–11 enrolled in school less than 12 months and whose primary language is Spanish are required to complete a primary language test. The <i>SABE2</i> assessment is a multiple-choice test that allows comparisons with a national sample of Spanish-speaking students in reading, language, and mathematics (grades 2–8 only).	This is an assessment of student achievement of California content standards in English–language arts, mathematics, history–social science, and science for grades 9–11. Test scores indicate levels of student performance (e.g., Advanced, Proficient, Basic, Below Basic, and Far Below Basic).	Beginning in 2004, all public high school students must pass <i>CAHSEE</i> to receive a high school diploma. The exam focuses on reading, writing, and mathematics and is based on state academic content standards. English learners may defer the exam for a short period of time.	All public school districts are required to annually assess the proficiency of English learners in grades 2–12 in listening, speaking, reading, and writing in English. <i>CELDT</i> is not a part of the STAR program.

## Other Assessments and Requirements

<i>Golden State Examination (GSE)</i> <sup>*</sup> (Assembly Bills 265, 3488)	<i>SAT I and II and ACT</i> <sup>^</sup>	<i>Advanced Placement (AP) and International Baccalaureate (IB)</i> <sup>*</sup>	University of California/California State University (UC/CSU) Placement Examinations <sup>*</sup>	Locally Adopted Measures (e.g., Career-Technical Education, ESLRs, etc.) <sup>^*</sup>
This is a voluntary assessment of students' knowledge of subjects and their application of that knowledge. If students attain high honors, honors, or recognition designation on six GSEs, they are eligible for the Golden State Seal Merit Diploma.	The College Board publishes <i>SAT</i> , the primary college entrance exam in the country; <i>SAT I</i> focuses on verbal and mathematics skills and reasoning. <i>SAT II</i> provides individual achievement tests in a variety of subject areas. American College Testing publishes <i>ACT</i> . This is the other major college entrance examination in the country and focuses on English, math, reading, and science reasoning.	The College Board publishes <i>AP</i> exams, individual subject matter tests in more than 30 different fields. The International Baccalaureate Organization publishes the <i>IB</i> exams.	UC and CSU students must pass the placement exams in English and/or mathematics or achieve designated scores on <i>SAT</i> , <i>ACT</i> , <i>AP</i> , or <i>IB</i> .	Locally adopted measures are established by districts/schools and go beyond state assessments. They may include demonstration of proficiencies in any of the career-technical education, arts, SCANS skills, or other standards as required for graduation.

Note: Norm-referenced tests are indicated with the icon (<sup>^</sup>), and criterion-referenced tests are indicated with an asterisk (<sup>\*</sup>)

If the number of standards was relatively limited, that would certainly be the case. In practice, schools must select which standards to target. Part of that decision will be based on which standards are being tested; therefore, the following section contains a discussion of high-stakes testing (mandatory and voluntary) and possible strategies to identify target standards.

Target standards are those that:

- Include the essential content, ideas, and skills that the school community determines students must master at the benchmarked level.
- Reflect the vertical alignment between the high school and feeder middle schools.
- Are tested in high-stakes, mandatory, and voluntary assessments as determined by a test item analysis where possible. A test item analysis of state-level standards includes the number of test questions related to each standard and the ways in which the standards are assessed.

## Mandatory Statewide Assessments

Mandatory tests required by state law serve several purposes. The STAR program, which requires that students in grades nine through eleven be tested in reading, writing, mathematics, history–social science, and science, has three components: the criterion-referenced *California Standards Tests*; a national standardized norm-referenced test, the *Stanford 9*; and a primary language test for English learners whose primary language is Spanish, the *Spanish Assessment of Basic Education, Second Edition (SABE/2)*. The latter two tests may change in the future.

Beginning in 2004, all students will need to pass *CAHSEE* to receive a high school diploma. In addition, school districts are required to assess the proficiency of English learners in grades two through twelve by means of the *California English-Language Development Test*.

### California Standards Tests

The *California Standards Tests* are aligned directly with the state's academic standards. All four subject areas—English–language arts,

mathematics, history–social science, and science—are assessed in grades nine through eleven. The *California Standards Tests* are the state’s primary large-scale assessment of standards-based performance in grades two through eleven. The standards selected are specific to the year the examination is administered.<sup>9</sup> All standards will eventually be assessed over a multiyear period. This state-level, summative assessment is designed to provide schools and districts with data for accountability and general planning purposes. Beginning in 2002, the tests will provide information to students about their mastery of the content standards.

Student mastery of the standards is measured against a performance benchmark denoting the degree to which the student has mastered the content. SBE has selected five performance levels—Advanced, Proficient, Basic, Below Basic, and Far Below Basic—to categorize student performance on the *California Standards Tests* and has set Proficient as the target level or benchmark for all students tested.

#### National Standardized Norm-Referenced Test

The *Stanford 9* is currently the national standardized norm-referenced test selected by SBE to meet a requirement of the STAR program that students in grades two through eleven be tested annually in basic skills.<sup>10</sup> At the high school level, the *Stanford 9* tests reading, writing, mathematics, history–social science, and science in grades nine through eleven. It is not aligned to California’s standards.

#### Primary Language Test for English Learners

The STAR program also requires that English learners in grades two through eleven who are enrolled in California schools less than 12 months and whose primary language is Spanish complete a primary language test. The *Spanish Assessment of Basic Education, Second Edition (SABE/2)*, was adopted by SBE and is currently being used for assessment. The *SABE/2* assessment is a multiple-choice test that allows comparisons with a national sample of Spanish-speaking students in reading, language, and mathematics at the high school level. Other English learners who have been enrolled in California public schools for fewer than 12 months must also take a test in their primary language if

one is available. Primary language testing is a district option for students who have been enrolled more than 12 months before testing.

### California High School Exit Examination

The *California High School Exit Examination* is a criterion-referenced test that is aligned with selected state standards in English–language arts for grades nine and ten and in mathematics for grade six through algebra 1. To help high schools focus on key standards, Senate Bill 2X (1999) established a panel to delineate the exact mathematics and language arts standards to be addressed in *CAHSEE*. This test “blueprint” and the standards may be viewed on the CDE Web site <<http://www.cde.ca.gov/statetests/cahsee/admin.html>>.

Current law requires that, beginning in 2004, no student will receive a high school diploma without passing both parts of *CAHSEE*. Students who do not pass the exit examination have additional opportunities to take the examination. Students must retake the examination until they pass the English–language arts and the mathematics sections; however, students may retake only those sections not previously passed.

Like the *California Standards Tests*, *CAHSEE* is also a state test used for making decisions, planning programs, and making schools accountable to the public. The test blueprint can help districts and schools focus instruction on key standards. Schools will need to administer local assessments frequently during the course of a school year to verify student achievement and guide teachers in assisting students in areas of need.

California high schools should focus on the mathematics and language arts standards identified by SBE for *CAHSEE*. It seems only logical to widen this focus to include at least the national norm-referenced test (currently the *Stanford 9*) adopted by SBE and the *California Standards Tests* standards. Only a few standards need to be added to include the *SAT I*, *ACT*, and *GSE* standards for mathematics and language arts.

Because early student success on *CAHSEE* may reflect preparation in the middle grades, active partnerships between high schools and their feeder middle schools have never been more critical.



### California English-Language Development Test

The State Board of Education adopted English-language development standards to assist teachers in determining when English learners have developed fluency in English and proficiency in the California English-language arts content standards. The *California English-Language Development Test (CELDT)* is used to assess the proficiency of English learners in grades two through twelve in listening, speaking, reading, and writing in English. It is not a part of the STAR program; however, districts are required to administer *CELDT* annually to all English learners.

## Other Assessments and Requirements

The state academic content standards and other standards are also reflected in tests, such as *SAT* and *ACT*, that have critical outcomes for both students and schools.

### SAT and ACT Assessment

Acceptance of students to competitive colleges is partly dependent on *SAT* scores, and aggregated scores for schools are usually published by the media in comparison with local, state, and national averages. *SAT II*, which includes individual, specific subject matter tests in writing, literature, U.S. history, mathematics, biology, chemistry, physics, French, and Spanish, has equally critical outcomes for students.

Because *SAT* is a high-stakes test, schools may benefit from conducting item analyses of sample tests in relation to the California content standards to help focus the instruction in mathematics and language arts. The College Board provides samples of *SAT* on its Web site <<http://www3.collegeboard.com/satprep/index.jsp>>. *SAT II* samples may be analyzed in relation to standards for higher-level language arts, mathematics, and academic courses.

Another assessment accepted by certain colleges is *ACT*. The *ACT Assessment* is designed to assess high school students' general educational development and their ability to complete college-level work. The tests

cover four skill areas: English, mathematics, reading, and science reasoning. ACT samples may be viewed on the ACT Web site <<http://www.act.org/aap/testprep/samples.html>>. As with SAT, schools may benefit from conducting item analyses of sample tests in relation to the California content standards to help focus instruction in the subject areas tested.

#### Advanced Placement and International Baccalaureate

Rigorous courses and associated high-stakes tests, such as the *Advanced Placement (AP)* and *International Baccalaureate (IB)* examinations, are significant factors in determining students' competitiveness for college admission. The courses associated with these tests add up to eight "honors grade points" to the calculation of a student's grade point average (GPA.) The GPAs for freshmen admitted for fall 2000 at two campuses of the University of California, Los Angeles and Berkeley, were 4.17 and 4.15, respectively.

Most teachers of AP and IB courses have been specifically trained in both course and examination content. Samples of each AP test are available on the College Board Web site <<http://www.collegeboard.org/ap>>, and more study examples and information are available on a related site <<http://www.collegeboard.org/ap/students/prep/index.html>>. The IB courses and exam content are discussed on the International Baccalaureate Organization Web site <<http://www.ibo.org>>.

The AP and IB exams are already related to specific course work and have clearly delineated performance expectations significantly above those of the state academic content standards. The teachers of these courses are trained in expectations of the exam, and the test makers' curriculum content suggestions are all oriented to the test. In a situation in which the courses were built around the exams initially, item analysis is a moot point.

#### Golden State Examinations

Like AP and IB course work, the *Golden State Examinations (GSEs)* test a variety of academic disciplines. Governor's Scholars who achieve the highest scores on AP calculus and science exams or IB exams, or on

selected *GSE* mathematics or science exams where *AP* or *IB* exams are not available, receive scholarships for postsecondary education expenses.<sup>11</sup> The material covered in *GSEs* has been fully aligned with the California content standards. Although no special teacher training is offered, extensive teacher guides delineating the standards tested through *GSE* and sample test items are available on the CDE Web site <<http://www.cde.ca.gov/statetests>>.

### Requirements of Public Universities

Applicants to the University of California (UC) must complete a sequence of high school courses known as the *a–g* requirements: history–social science (two years), English (four years), mathematics (three years), a laboratory science (two years), a foreign language (two years), a college prep elective (two years currently; one year beginning in 2003), and visual and performing arts (one year beginning in 2003).

The California State University (CSU) system requires incoming first-year students to complete, with a grade of C or better in each course, the same pattern of study as that of the UC system but with the following exceptions: U.S. history or U.S. history and government (one year) and electives from two academic fields (three years).

About half of the first-year students entering CSU and almost a third of those entering UC are assigned to remedial courses in English or mathematics or both because of their failure on placement tests. To avoid remedial English courses at CSU, students must pass the English placement test or receive a score of 550 on *SAT I* verbal, 660 on *SAT II* writing, or 25 on *ACT* English. To enroll in mathematics courses, they must pass the entry-level mathematics test or receive a score of 560 on *SAT I* or *SAT II* mathematics or a score of 25 on *ACT* mathematics. Students attending a UC campus must pass the Subject A writing examination or submit a score of 3 or higher on the *AP* English examination or 5 or higher on the *IB* Higher Level English A examination. Otherwise they must take a remedial English course. An item analysis is not possible because neither CSU nor UC makes sample placement tests available.

## Other Content/Career Standards and Assessments

Core academic standards are the priority, and the reality today is that the high school diploma will be tied to the mastery of these basics. However, to focus only on core academic content standards would shortchange the mission of most high schools in the state: to prepare students to become productive and responsible citizens of the global community.

Offerings such as career-technical education courses and the visual and performing arts can increase both attendance and graduation rates as well as help prepare students for careers.<sup>12</sup> The blending of content/career standards and academic standards has been found to increase student-learning gains on the *Iowa Test of Basic Skills*, a national norm-referenced assessment.<sup>13</sup> In addition, health and physical education standards help to ensure that students are healthy in both mind and body.

Students need time to master academic standards. Integrating academic standards into performance-based, contextually rich classes in the arts and career areas enables students to have multiple opportunities to learn and apply the standards. Students not only can gain more time to master difficult standards but also can transfer their learning across several disciplines.<sup>14</sup>

Career-technical education standards have been developed for grades six through twelve in agriculture, business, industrial technology, health careers, and home economics. These standards are available on the CDE Web site <<http://www.cde.ca.gov/challenge/career.html>>. The five areas are being incorporated into 15 industry sectors that reflect the greatest future employment opportunities in California.<sup>15</sup> Efforts are underway to identify academic content standards in each of these industry sectors to assist schools in offering academic rigor and relevance while preparing students for future employment.

Student achievement of career-technical education standards is measured through *Assessments in Career Education (ACE)*, a system of selected assessments in career-specific course work. The system is parallel to that of *GSE* but focuses on career education disciplines. Like the *GSE*, the use

of ACE is optional for districts and provides students with notations on transcripts and diploma seals at various levels of mastery. Assessments are currently provided in the Agriculture Core, including agriculture and natural resources sectors; Health Care Core; Technology Core, including energy and utilities, engineering, building trades and construction, manufacturing and product development, and transportation; Computer Science/Information Technology Cluster; and Food Service and Hospitality Cluster, including hospitality, tourism, and recreation.<sup>16</sup>

### Local Outcomes and Assessments

Local outcomes and assessments reflect the knowledge, attitudes, and skills that the community wants its graduates to demonstrate. For most California school districts, the state content standards in English—language arts, mathematics, history—social science, and science are the core of their locally adopted curricular standards. Local outcomes include other curricular standards, end-of-course outcomes, graduation requirements set by the school and district, and Expected Schoolwide Learning Results.

A local performance assessment system linked to state standards is an important factor in measuring and reporting student progress. *Taking Center Stage*, the CDE publication on standards-based education in the middle school, provides suggestions on how to align a local performance-standards system with the state system.<sup>17</sup>

## Public Accountability

The accountability system in California has three interdependent elements:

- Academic **content standards** in the four core content areas: language arts, mathematics, science, and history—social science
- An **assessment and reporting system** using both a nationally norm-referenced test for national comparison purposes and a criterion-referenced test comparing individual performance to a standard of acceptable performance based on the state's content standards

- The **Academic Performance Index (API)** to determine growth and to be used for conferring awards and identifying schools for an intervention program

The Public Schools Accountability Act (PSAA) of 1999 established the statewide system of accountability. Under PSAA, schools designated as “low performing” (i.e., high need) are invited to participate in the Immediate Intervention/Underperforming Schools Program (II/USP), which provides assistance to schools that fail to meet their API growth targets and have an API below the fiftieth percentile compared with all other high schools. The Act also provides for awards to schools that meet their API growth targets. Information on PSAA, II/USP, and the Governor’s Performance Awards may be found on the CDE Web site <<http://www.cde.ca.gov/psaa/>>.

Although to some degree the term of accreditation awarded through the regional process is a highly visible accountability measure for most California high schools, the API is, by far, the most public measure of a school’s success to date. The *CAHSEE* student performance data will certainly rival and may surpass the overall API data in visibility and influence on middle grades and high school instruction.

The API is initially based on the results from the *Stanford 9*. See Table 4 for the proposed phasing in of additional components to create a state-wide accountability system with multiple measures of standards-aligned student achievement.

## Activities Necessary for Standards Achievement

For students to achieve high standards, a concerted effort is required by everyone involved in the education of students. Cornerstone activities to meet high standards are as follows:

1. Provide an understanding of how to align academic content standards with the numerous high-stakes assessments and accountability measures that reflect the broad mission of today’s high schools.

**Table 4** Tentative Timeline for the Proposed Phase-in of Indicators in the API

Indicators	1999	2000	2001	2002	2003	2004
<i>Stanford 9</i>	X	X	X	X	X	X
<i>California Standards Tests</i>						
English—language arts (grades 2–11)			X	X	X	X
Mathematics (grades 2–11)				X	X	X
History—social science (grades 9–11)				X	X	X
Science (grades 9–11)				X	X	X
Attendance* (Staff and pupil)				X	X	X
Graduation Rate*				X	X	X
<i>California High School Exit Examination</i>						X

Note: All indicators beyond 2001 are tentative until approved by the State Board of Education. Approval may be prior to or later than the date indicated.

\*These components are required by legislation once they are determined to be valid, reliable, and available.

2. Identify and implement ways in which to target standards, cluster standards around important concepts, and develop appropriate instruction.
3. Establish vertical alignment of standards between the high school and its feeder middle schools.
4. Provide ample and appropriate high-quality professional development around standards-based instruction with sufficient time for ongoing and targeted staff collaboration.

### Notes

1. Ruth Mitchell, "Focusing on Learning: Change Driven by Standards," *Center X Quarterly*, Vol. 7, No. 1 (Fall 1994), quoted in Kate Jamentz, *Standards: From Document to Dialogue*. San Francisco: Western Assessment Collaborative, WestEd, 1998. Available on the Web site <<http://www.wested.org/cs/wew/view/rs/18>>.
2. *California's Changing Income Distribution*. Sacramento, Calif.: Legislative Analyst's Office, August 10, 2000. Available on the Web site <[http://www.lao.ca.gov/0800\\_inc\\_dist/0800\\_income\\_distribution.html](http://www.lao.ca.gov/0800_inc_dist/0800_income_distribution.html)>.

3. Mary G. Visser and others, *Key High School Reform Strategies: An Overview of Research Findings*. Berkeley: MPR Associates, Inc., 1999. Available on the Web site <<http://www.ed.gov/offices/OVAE/hahs>>.
4. Pedro Noguera, "Developing Systems to Drive Student Success," *Restructuring Brief*, No. 20 (November 1999), p. 1. California Professional Development Consortia. Available on the Web site <[http://www.sonoma.k12.ca.us/Depts/pdc/PDF/brief\\_20.pdf](http://www.sonoma.k12.ca.us/Depts/pdc/PDF/brief_20.pdf)>.
5. Accreditation refers to the approval granted to an institution of learning by an official review board after the institution has met specific requirements. In California the Western Association of Schools and Colleges (WASC) accredits most comprehensive high schools. Other accrediting agencies (e.g., Baldrige) also review and bestow accreditation on schools. The California Department of Education and WASC currently share a joint process, documented in *Focus on Learning*, which meets both district and school requirements (*Education Code* Section 64000) and WASC accrediting requirements. Although participation in the accrediting process is voluntary, most schools choose to use the *Focus on Learning* approach as one means of assuring the public that the high school can be trusted to provide a high-quality education.
6. Standardized tests are uniform in content, administration, and scoring and allow the comparison of results across student groups, classrooms, schools, districts, and states. There are two types of standardized tests: norm-referenced and criterion-referenced.
7. Norm-referenced tests are standardized tests that compare individual or group performance to the performance of a larger group. Usually the larger group, or "norm group," is a national sample representing a wide cross-section of students.
8. Criterion-referenced tests are standardized tests that compare individual performance to a standard of acceptable performance.
9. *California Standards Tests* blueprints are available on the Web site <<http://www.cde.ca.gov/statetests/star/s2blueprt.html>>.
10. The legislative basis of the STAR program is Senate Bill 376, Alpert (1997). The bill may be viewed on the Web site <[http://www.leginfo.ca.gov/pub/97-98/bill/sen/sb\\_0351-0400/sb\\_376\\_bill\\_19971010\\_chaptered.html](http://www.leginfo.ca.gov/pub/97-98/bill/sen/sb_0351-0400/sb_376_bill_19971010_chaptered.html)>.
11. The initiating legislation for the Governor's Scholarship Programs is Senate Bill 1688, Polanco (September 2000). The bill may be viewed on the Web site <[http://www.leginfo.ca.gov/pub/99-00/bill/sen/sb\\_1651-1700/sb\\_1688\\_bill\\_20000912\\_chaptered.html](http://www.leginfo.ca.gov/pub/99-00/bill/sen/sb_1651-1700/sb_1688_bill_20000912_chaptered.html)>.
12. Kenneth Gray, *Getting Real: Helping Teens Find Their Future*. Thousand Oaks, Calif.: Corwin Press, Inc., 2000, quoting N. Kostelba, "Variables predicting persistence of community college students." University Park: Pennsylvania State University, 1997, p. 7 (dissertation).
13. Fred M. Newmann and others, *Authentic Intellectual Work and Standardized Tests: Conflict or Coexistence?* Consortium on Chicago School Research, 2001, p. 14. Available on the Web site <<http://www.consortium-chicago.org/>>.



14. *How People Learn*. Edited by John D. Bransford, A. Brown, and R. Cocking. Washington, D.C.: National Academy Press, 1999, p. 66.
15. The 15 highest future employment opportunities in industry sectors of California are Agriculture and Natural Resources; Arts, Media, and Entertainment Technology; Building Trades and Construction; Business and Finance; Energy and Utilities; Engineering; Fashion and Interior Design; Health Services; Hospitality, Tourism, and Recreation; Information Technology; Transportation; Manufacturing and Product Development; Public and Private Education Services; Retail and Wholesale Trade; and Public Services.
16. Further information regarding career-technical education assessments is available on the Web site <<http://www.cde.ca.gov/statetests/ace/>>.
17. *Taking Center Stage: A Commitment to Standards-Based Education for California's Middle Grades Students*. Sacramento: California Department of Education, 2001.